

Grant or IA Number: GL – 00E00469 – 0

Project Title: Technical Assistance to Agricultural Producers in SE Lake Michigan Watersheds

Reporting Period Covered: 11-01-2012 to 03-31-2013

Principal Investigator: Michael Rubley II

1. What work was accomplished for this reporting period?

Assistance was given to 18 landowners implementing 24 best management practices on 4,201 acres. The 24 BMP's that were implemented have STEPL reduction estimates of 3,871 Lbs of N, 1085 Lbs of P, and 646 Tons of sediment. Pest Management Plans addressing environmentally sound use of pesticides were developed and implemented on 746 acres.

2. What, if any, changes were made from the Object Class Categories listed in Sec. B of the SF 424A or Box 29 of the IA, as applicable?

None

3. If a problem was encountered, what action was taken to correct it?

N/A

4. What work is projected for the new reporting period activity? What are the expected expenditures associated with the upcoming work?

Continue planning and providing implementation assistance to move projects forward and implement best management practices.

5. Is the project work on schedule? List activities from the Work Plan, and any required Quality System Documentation, and report as percent completed.

Project work is on schedule. Unlike other "single-site" projects that may have specific activities and implementation schedules, this type of project requires a broader approach and oversight of different sites, practices and landowners, as well as a great deal of outreach and prioritization. Below is a summary of approved project tasks and where we are in terms of progress.

(a) This reporting period

**ACTIVITY**

**Promote project through newsletters, websites, press releases, workshops, etc. - Ongoing**

- ✓ Distribution of AWEPP brochures and program information for each county.
- ✓ Promotion of project through District web pages and newsletters in SE Lake Michigan Watershed as well as NRCS state webpage.
- ✓

**Identify & prioritize sites of concern as listed in approved watershed management plans, MSU-IWR's HIT program, NRCS inventories. - Ongoing**

- ✓ Continued outreach and work with landowners in area identified on AWEPP Priority Area Map. (See Attached)

**Provide targeted education & outreach to those sites identified as priorities**

- ✓ This has and will be an ongoing activity throughout the project.
- ✓ Contracted with The Resource Institute of Michigan (TRIM) - workshops have been held in priority areas, more are planned.

**Meet w/all interested landowners to determine eligibility, discuss programs**

- ✓ Ongoing activity. 18 landowners were assisted.
- ✓ 24 Best management practices were implemented.

**Assist NRCS with conservation plan development and conservation practice installations**

- ✓ 4,201 acres Planned/Certified – 8% of overall goal for AWEPP

**Meet with project partners (Advisory Team) to monitor & evaluate project progress.**

- ✓ Routine communications are made with project partners. In many cases this is directly through our work with customers as they are often also customers of project partners. Quarterly reports and updates are also made to keep project partners updated as to our progress and theirs.

**Collect quarterly activity reports from partners (# of landowner visits, # of acres, # enrolled in AWEPP)**

- ✓ Activity reports continue to be requested quarterly from project partners.
- ✓ NRCS report for AWEPP program will be completed for FY-13 recording BMP's installed.

**Collect water quality monitoring data from all relevant partners**

- ✓ Water quality monitoring data has been requested quarterly from project partners.

**(b) For the project**

**ACTIVITY**

**Promote project through newsletters, websites, press releases, workshops, etc. - Ongoing**

- ✓ Distribution of AWEPP brochures and program information for each county.
- ✓ Promotion of project through District web pages in SE Lake Michigan Watershed as well as NRCS state webpage.
- ✓ Conservation District newsletters and e-news highlighting programs and assistance continue to be sent to landowners.

- ✓ Involvement in Michigan Dept of Agriculture Sprayer Clinic targeting agricultural producers (over 405 landowners informed of AWEP)
- ✓ Participation in Watershed Committees
- ✓ Involvement in Rabbit River Watershed (A tributary of the Kalamazoo River, located in an AOC)
- ✓ Committee targeting agricultural producers and workshops.

**Identify & prioritize sites of concern as listed in approved watershed management plans, MSU-IWR's HIT program, NRCS inventories. - Ongoing**

- ✓ Use of High Impact Targeting models developed by MSU to allow for prioritization of sites at the field level.
- ✓ Review of existing management plans for targeting critical sites throughout the watershed.
- ✓ Landowner assistance based AWEP Priority Area Map
- ✓ Review of NRCS inventories/backlog.

**Provide targeted education & outreach to those sites identified as priorities**

- ✓ This has and will be an ongoing activity throughout the project.
- ✓ Preference given to landowners in priority areas.

**Meet w/all interested landowners to determine eligibility, discuss programs**

- ✓ Ongoing activity. 90 landowners assisted to date.
- ✓ 142 Best management practices implemented to date.

**Assist NRCS with conservation plan development and conservation practice installations**

- ✓ 39,761 acres Planned/Certified to date. – 79% complete

**Meet with project partners (Advisory Team) to monitor & evaluate project progress.**

- ✓ Routine communications are made with project partners. In many cases this is directly through our work with customers as they are often also customers of project partners. Quarterly reports and updates are also made to keep project partners updated as to our progress and theirs.

**Collect quarterly activity reports from partners (# of landowner visits, # of acres, # enrolled in AWEP)**

- ✓ Activity reports continue to be requested quarterly from project partners.
- ✓ NRCS report for AWEP program in to date records BMP's being installed on 40,121.10 acres.

**Collect water quality monitoring data from all relevant partners**

- ✓ Water quality monitoring from DEQ macro invertebrate studies for Kalamazoo and St. Joe watersheds have been reported to date.
  - Overall data of 76 sites monitored in the AWEP area show, 1.3% were ranked poor, 65.8% were ranked acceptable, 9.2% were ranked good, and 23.7% were ranked excellent.

6. Does the project funding rate support the work progress? Report as percent spent of budgeted amounts for Federal and non-Federal.

$\$687,197.00 / \$793,424.00 = 86\%$  Federal

$\$397,251.89 / \$441,900.00 = 89\%$  Non Federal

39,761 acres / 50,000 acres BMP Implementation = 79%

7. Is there a change in principal investigator? No

8. Will the project take longer than the approved project period? If so, have you formally requested an amendment in writing?

It is not anticipated that this project will take longer than the approved project period.

9. What is the date and amount of your latest drawdown request? If no request has been submitted, please explain.

Last drawdown was on 03/30/2013 for \$82,140.91

10. What is the date of your latest entry into the Great Lakes Accountability System (GLAS)?

Latest entry into GLAS completed on April 12, 2013.

11. Please include the STEPL modeling results. Optionally, you can send in the actual STEPL spreadsheet.

1. Total load by subwatersheds												
Watershed	N Load (no BMP)	P Load (no BMP)	BOD Load (no BMP)	Sediment Load (no BMP)	N Reduction	P Reduction	BOD Reduction	Sediment Reduction	N Load (with BMP)	P Load (with BMP)	BOD (with BMP)	Sediment Load (with BMP)
	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year
Calumet 200	24873.6	6193.9	51342.3	3216.7	833.0	3122.4	520.8	520.8	21846.8	5360.9	48219.9	2895.9
St Joe	6327.9	1682.2	13047.7	903.9	252.8	844.3	805.9	125.9	5483.7	1429.5	12241.9	778.0
Black River	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	31201.5	7876.1	64390.0	4120.6	1085.8	3971.0	3926.8	646.7	27330.5	6790.3	60461.7	3473.9

2. Total load by land uses (with BMP)				
Sources	N Load (lb/yr)	P Load (lb/yr)	BOD Load (lb/yr)	Sediment Load (lb/yr)
Urban	0.00	0.00	0.00	0.00
Tropical	27239.27	6747.95	60090.19	3459.02
Pastureland	0.00	0.00	0.00	0.00
Forest	76.89	35.85	342.84	4.34
Feedlots	0.00	0.00	0.00	0.00
Asar Defined	0.00	0.00	0.00	0.00
Septic	0.00	0.00	0.00	0.00
Swamp	14.34	5.52	28.89	10.55
Streambank	0.00	0.00	0.00	0.00
Groundwater	0.00	0.00	0.00	0.00
Total	27330.51	6790.33	60461.72	3473.90

12. What is the date of your latest entry into BeachGuard? N/A

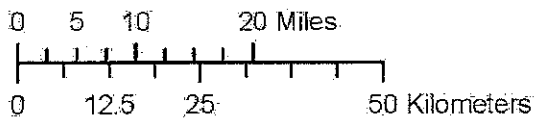
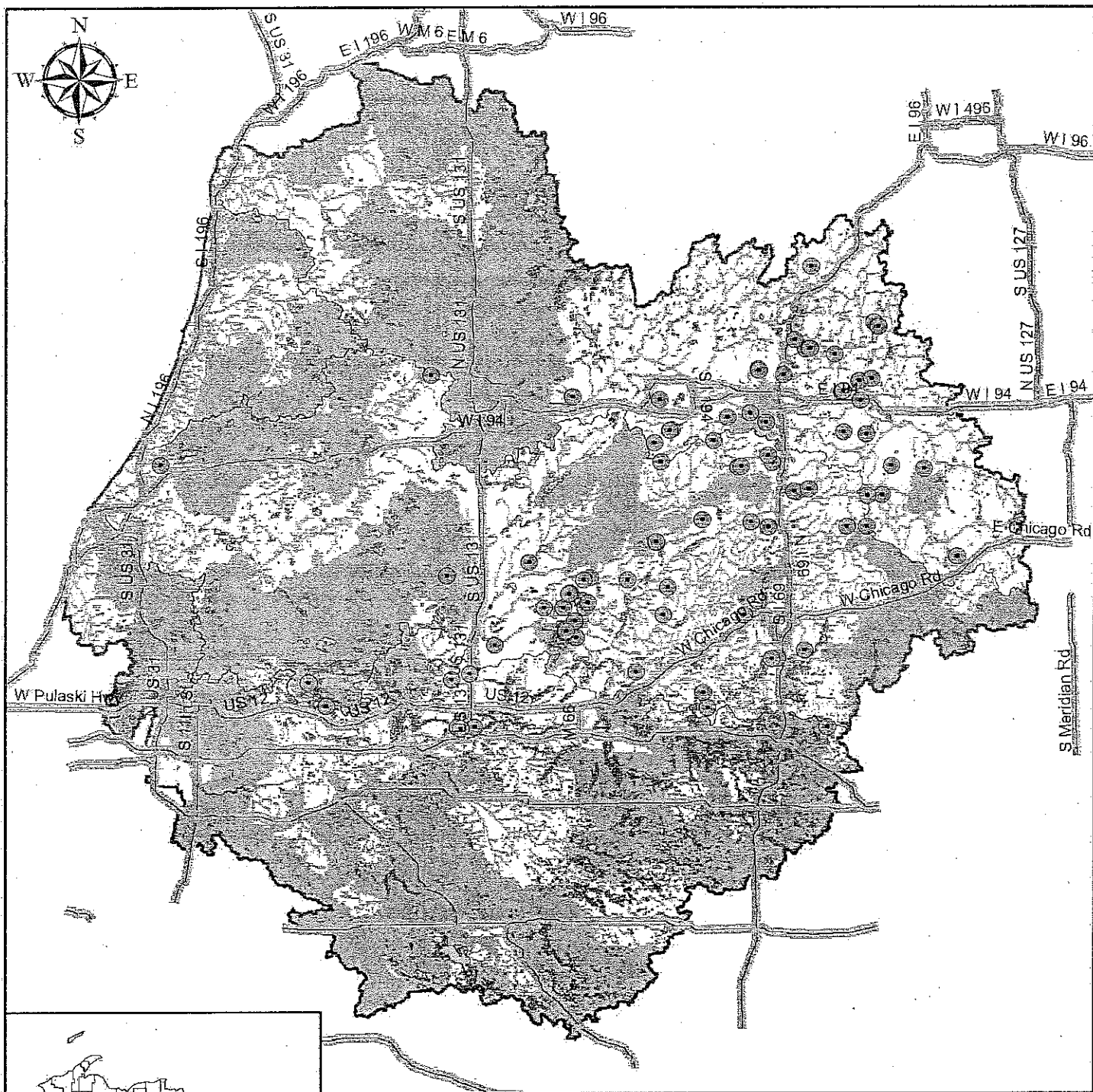
13. Are there any particular success stories associated with the GLRI project that you'd like to share?

N/A







14. Please remember to attach all relevant deliverables associated with the project, in addition to the submission of the progress report.

Two Stage Ditch	31				
Irrigation Water Management	160.4				
Nutrient Management	746				
Integrated Pest Management	746				
Irrigation Water Management	324.6				
Grassed Waterways	45				
Waterway Outlet	1				
Nutrient Management	17.2				
Forage and Biomass Planting	45				
Vegetative Barrier	43				
Cover Crops	25.6				
Conservation Plan	165				
Seasonal High Tunnel	1				
Conservation Planning	375				
forest mgmt plan	150				
Conservation Planning	194				
forest mgmt plan	59.1				
Seasonal High Tunnel	1				
forest mgmt plan	150				
Conservation Planning	131				
Conservation Planning	229				
forest mgmt plan	135				
Comprehensive Nutrient Mgmt Plan	304				
Conservation Planning	122.13				

# AWEP BMP Tracking Map as of 3-31-2013



## Legend

-  BMP  
 highways  
 Waterbodies  
 Streams  
 AWEPArea  
 AWEPPriorityAreas



Grant or IA Number: GL – 00E00469 – 0

Project Title: Technical Assistance to Agricultural Producers in SE Lake Michigan Watersheds

Reporting Period Covered: 04-01-2012 to 10-31-2012

Principal Investigator: Michael Rubley II

1. What work was accomplished for this reporting period?

Assistance was given to 15 landowners implementing 24 best management practices on 3,650 acres. The 24 BMP's that were implemented have STEPL reduction estimates of 2,737 Lbs of N, 964.9 Lbs of P, and 592.2 Tons of sediment. Pest Management Plans addressing environmentally sound use of pesticides were developed and implemented on 897.9 acres.

2. What, if any, changes were made from the Object Class Categories listed in Sec. B of the SF 424A or Box 29 of the IA, as applicable?

None

3. If a problem was encountered, what action was taken to correct it?

N/A

4. What work is projected for the new reporting period activity? What are the expected expenditures associated with the upcoming work?

Continue planning and providing implementation assistance to move projects forward and implement best management practices.

5. Is the project work on schedule? List activities from the Work Plan, and any required Quality System Documentation, and report as percent completed.

Project work is on schedule. Unlike other "single-site" projects that may have specific activities and implementation schedules, this type of project requires a broader approach and oversight of different sites, practices and landowners, as well as a great deal of outreach and prioritization. Below is a summary of approved project tasks and where we are in terms of progress.

(a) This reporting period

**ACTIVITY**

**Promote project through newsletters, websites, press releases, workshops, etc. - Ongoing**

- ✓ Distribution of AWEP brochures and program information for each county.
- ✓ Promotion of project through District web pages and newsletters in SE Lake Michigan Watershed as well as NRCS state webpage.
- ✓ Involvement in Rabbit River Watershed Committee targeting agricultural producers (A tributary of the Kalamazoo River, located in an AOC).

**Identify & prioritize sites of concern as listed in approved watershed management plans, MSU-IWR's HIT program, NRCS inventories. - Ongoing**

- ✓ Continued outreach and work with landowners in area identified on AWEPP Priority Area Map. (See Attached)

**Provide targeted education & outreach to those sites identified as priorities**

- ✓ This has and will be an ongoing activity throughout the project.
- ✓ Contracted with The Resource Institute of Michigan (TRIM) - workshops have been held in priority areas, more are planned.

**Meet w/all interested landowners to determine eligibility, discuss programs**

- ✓ Ongoing activity. 15 landowners were assisted.
- ✓ 24 Best management practices were implemented.

**Assist NRCS with conservation plan development and conservation practice installations**

- ✓ 3,650 acres Planned/Certified - 7% of overall goal for AWEPP

**Meet with project partners (Advisory Team) to monitor & evaluate project progress.**

- ✓ Routine communications are made with project partners. In many cases this is directly through our work with customers as they are often also customers of project partners. Quarterly reports and updates are also made to keep project partners updated as to our progress and theirs.

**Collect quarterly activity reports from partners (# of landowner visits, # of acres, # enrolled in AWEPP)**

- ✓ Activity reports continue to be requested quarterly from project partners.
- ✓ NRCS report for AWEPP program in FY-2012 records BMP's being installed on 19,537.80 acres.

**Collect water quality monitoring data from all relevant partners**

- ✓ Water quality monitoring data has been requested quarterly from project partners. These reports have been delayed until final reports have been completed for year 2012.

**(b) For the project**

**ACTIVITY**

**Promote project through newsletters, websites, press releases, workshops, etc. - Ongoing**

- ✓ Distribution of AWEPP brochures and program information for each county.
- ✓ Promotion of project through District web pages in SE Lake Michigan Watershed as well as NRCS state webpage.

- ✓ Conservation District newsletters and e-news highlighting programs and assistance continue to be sent to landowners.
- ✓ Involvement in Michigan Dept of Agriculture Sprayer Clinic targeting agricultural producers (over 405 landowners informed of AWEPP)
- ✓ Participation in Watershed Committees

**Identify & prioritize sites of concern as listed in approved watershed management plans, MSU-IWR's HIT program, NRCS inventories. - Ongoing**

- ✓ Use of High Impact Targeting models developed by MSU to allow for prioritization of sites at the field level.
- ✓ Review of existing management plans for targeting critical sites throughout the watershed.
- ✓ Landowner assistance based AWEPP Priority Area Map
- ✓ Review of NRCS inventories/backlog.

**Provide targeted education & outreach to those sites identified as priorities**

- ✓ This has and will be an ongoing activity throughout the project.
- ✓ Preference given to landowners in priority areas.

**Meet w/all interested landowners to determine eligibility, discuss programs**

- ✓ Ongoing activity. 72 landowners assisted to date.
- ✓ 118 Best management practices implemented to date.

**Assist NRCS with conservation plan development and conservation practice installations**

- ✓ 35,560 acres Planned/Certified to date. – 71% complete

**Meet with project partners (Advisory Team) to monitor & evaluate project progress.**

- ✓ Routine communications are made with project partners. In many cases this is directly through our work with customers as they are often also customers of project partners. Quarterly reports and updates are also made to keep project partners updated as to our progress and theirs.

**Collect quarterly activity reports from partners (# of landowner visits, # of acres, # enrolled in AWEPP)**

- ✓ Activity reports continue to be requested quarterly from project partners.
- ✓ NRCS report for AWEPP program in to date records BMP's being installed on 40,121.10 acres.

**Collect water quality monitoring data from all relevant partners**

- ✓ Water quality monitoring from DEQ macro invertebrate studies for Kalamazoo and St. Joe watersheds have been reported to date.
  - Overall data of 76 sites monitored in the AWEPP area show, 1.3% were ranked poor, 65.8% were ranked acceptable, 9.2% were ranked good, and 23.7% were ranked excellent.

6. Does the project funding rate support the work progress? Report as percent spent of budgeted amounts for Federal and non-Federal.

$\$570,103.09 / \$793,424.00 = 71\%$  Federal

$\$397,251.89 / \$441,900.00 = 89\%$  Non Federal

35,560 acres / 50,000 acres BMP Implementation = 71%

7. Is there a change in principal investigator? No

8. Will the project take longer than the approved project period? If so, have you formally requested an amendment in writing?

It is not anticipated that this project will take longer than the approved project period.

9. What is the date and amount of your latest drawdown request? If no request has been submitted, please explain.

Last drawdown was on 9/27/12 for \$63,500.00.

10. What is the date of your latest entry into the Great Lakes Accountability System (GLAS)?

Latest entry into GLAS completed on October 10, 2012.

11. Please include the STEPL modeling results. Optionally, you can send in the actual STEPL spreadsheet.

Total Load													
This is the summary of annual nutrient and sediment load for each subwatershed. This sheet is initially protected.													
1. Total load by subwatershed(s)													
Watershed	N Load (no BMP)	P Load (no BMP)	BOD Load (no BMP)	Sediment Load (no BMP)	N Reduction	P Reduction	BOD Reduction	Sediment Reduction	N Load (with BMP)	P Load (with BMP)	BOD (with BMP)	Sediment Load (with BMP)	%N Reduction
	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	%
Kalamazoo	18655.3	4762.1	38968.0	2470.3	2737.0	964.9	3656.3	592.2	16116.3	3797.1	35011.7	1878.2	14.6
St. Joe	11613.3	3060.3	24316.3	1644.3	1265.8	177.0	192.0	30.0	10547.5	2883.3	24124.3	1614.3	10.7
Black River	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	30668.6	7822.3	63184.3	4114.7	4002.8	1141.9	4048.3	622.2	26665.8	6680.4	59136.1	3492.5	13.1

2. Total load by land uses (with BMP)					
Sources	N Load (lb/yr)	P Load (lb/yr)	BOD Load (lb/yr)	Sediment Load (lb/yr)	
Urban	0.00	0.00	0.00	0.00	
Cropland	26664.11	6679.76	59132.67	3491.26	
Pastureland	0.00	0.00	0.00	0.00	
Forest	0.00	0.00	0.00	0.00	
Feedlots	0.00	0.00	0.00	0.00	
User Defined	0.00	0.00	0.00	0.00	
Septic	0.00	0.00	0.00	0.00	
Gully	0.00	0.00	0.00	0.00	
Streambank	1.69	0.65	3.38	1.24	
Groundwater	0.00	0.00	0.00	0.00	
Total	26665.80	6680.41	59136.05	3492.50	

12. What is the date of your latest entry into BeachGuard? N/A

13. Are there any particular success stories associated with the GLRI project that you'd like to share?

#### Rice Creek Floodplain Reconnection Project

In 2012 the Calhoun Conservation District completed five floodplain reconnections. These floodplain reconnections were in response to the stream being historically dredged in the late 1920's. The berm created from that dredging blocked high water flows from entering the natural wetland floodplains along the stream.

AWEP tasks completed included hydrologic analysis and geomorphic assessments at three properties to determine bank full elevations for five floodplain reconnection sites; totaling 33 acres of floodplain reconnections. We also completed documentation of sediment and phosphorus loading prior to construction and post construction.

We assisted the project engineering firm in interpretation of the survey data prior to their development of engineering designs for each of the five sites and applications for MDEQ permits. Pollutant load reductions for the bmp's installed totaled 39.6 tons per acre per year of sediment reduction, 68.2 pounds per year of phosphorus reduction, and 136.7 pounds per year of nitrogen reduction.

Geomorphic re-assessment evaluations and logging of data into RiverMorph for all three properties post construction were completed. These analysis' determined sediment and phosphorus loading, stream bank erosion and streambed aggradation/degradation post construction and after a bank full event.

A GIS map illustrating all floodplain reconnection location sites was prepared detailing the exact location of the work completed.

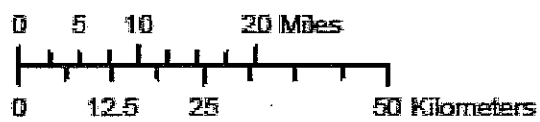
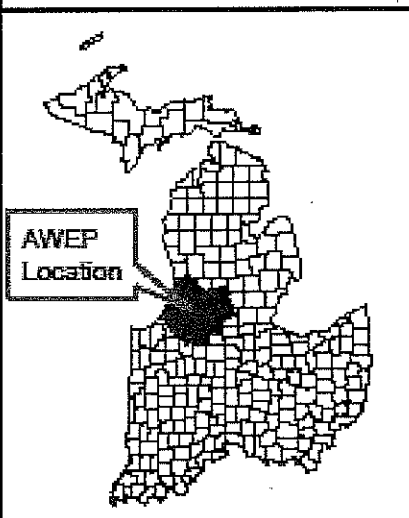
We were able to help assist multiple partners coordinated by the Calhoun Conservation District (CCCD) to complete the five floodplain reconnections. The following partners contributed in the following ways: GLRI/AWEP – Technicians providing survey, analysis and technical support;

- MDEQ – CMI Funding (Floodplain reconnection implementation funds \$120,450)
- Calhoun County Water Resources Commission (CCWRC) – Easement right-of-way, permitting at no cost, advisory role, and future easement monitoring (Donated project assistance total value \$25,049)
- Landowners – donated and recorded easements on their floodplain land, included in the project; to protect the newly created floodplain areas from future development and disturbance in perpetuity; to be monitored annually by Calhoun County Water Resources Commission. (Donated easement land value \$42,900)
- Calhoun County Road Commission (CCRC) – Road right-of-way easement, permitting at no cost, advisory role (Donated project assistance total value \$11,051)
- MDNR – Geomorphic analysis and design assistance (\$1,504)
- ❖ Total Partnership Contribution - \$200,954.00

A partnership sign with partner logos (GLRI, MDEQ, CCCD, CCWRC, CCRC, MDNR) is being developed and will be permanently displayed at one of the high traffic floodplain reconnection sites.

14. Please remember to attach all relevant deliverables associated with the project, in addition to the submission of the progress report.

Nutrient Management Plan	221.8
Pest Management Plan	
Pest Management Plan	57.5
Irrigation System Upgrade	
Irrigation Water Management Plan	141
Agrichemical Handling Facility	
Integrated Pest Mgmt Plan	
Nutrient Management Plan	618.6
Agrichemical Handling Facility	
Nutrient Management Plan	25.6
Cover Crops	25.6
Nutrient Management Plan	207.6
Floodplain Reconnection	11.69
Floodplain Reconnection	4.26
Floodplain Reconnection	17.05
Cover Crop Certification	221.8
Conservation Planning	375
Conservation Planning	1,200
Conservation Planning	522.7



- ### Legend

 **GMP** highways **Waterbodies**

## Streams

**AWEP Area**

**AWEP Priority Areas**



Grant or IA Number: GL – 00E00469 – 0

Project Title: Technical Assistance to Agricultural Producers in SE Lake Michigan Watersheds

Reporting Period Covered: 11-01-2011 to 03-31-2012

Principal Investigator: Michael Rubley II

1. What work was accomplished for this reporting period?

Assistance was given to 22 landowners implementing 43 best management practices on 8,366 acres. The 43 BMP's that were implemented have STEPL reduction estimates of 13,813.9 Lbs of N, 1,725.2 Lbs of P, 9,324.4 Lbs of BOD, and 282.6 Tons of sediment. Pest Management Plans addressing environmentally sound use of pesticides were developed and implemented on 2,007.8 acres.

2. What, if any, changes were made from the Object Class Categories listed in Sec. B of the SF 424A or Box 29 of the IA, as applicable?

None

3. If a problem was encountered, what action was taken to correct it?

N/A

4. What work is projected for the new reporting period activity? What are the expected expenditures associated with the upcoming work?

Continue planning and providing implementation assistance to move projects forward and implement best management practices.

5. Is the project work on schedule? List activities from the Work Plan, and any required Quality System Documentation, and report as percent completed.

Project work is on schedule. Unlike other "single-site" projects that may have specific activities and implementation schedules, this type of project requires a broader approach and oversight of different sites, practices and landowners, as well as a great deal of outreach and prioritization. Below is a summary of approved project tasks and where we are in terms of progress.

(a) This reporting period

**ACTIVITY**

**Promote project through newsletters, websites, press releases, workshops, etc. - Ongoing**

- ✓ Distribution of AWEPP brochures and program information for each county.
- ✓ Promotion of project through District web pages in SE Lake Michigan Watershed as well as NRCS state webpage.
- ✓ Involvement in Michigan Dept of Agriculture Sprayer Clinic, which targets agricultural producers (over 125 attendees)

**Identify & prioritize sites of concern as listed in approved watershed management plans, MSU-IWR's HIT program, NRCS inventories. - Ongoing**

- ✓ Creation of AWEPP Priority Area Map. (See Attached)

**Provide targeted education & outreach to those sites identified as priorities**

- ✓ This has and will be an ongoing activity throughout the project.

**Meet w/all interested landowners to determine eligibility, discuss programs**

- ✓ Ongoing activity. 22 landowners were assisted.
- ✓ 43 Best management practices were implemented.

**Assist NRCS with conservation plan development and conservation practice installations**

- ✓ 8,366 acres Planned/Certified – 16% of overall goal for AWEPP

**Meet with project partners (Advisory Team) to monitor & evaluate project progress.**

- ✓ Routine communications are made with project partners. In many cases this is directly through our work with customers as they are often also customers of project partners. Quarterly reports and updates are also made to keep project partners updated as to our progress and theirs.

**Collect quarterly activity reports from partners (# of landowner visits, # of acres, # enrolled in AWEPP)**

- ✓ Activity reports continue to be requested quarterly from project partners.
- ✓ NRCS report for AWEPP program in FY-2011 records BMP's being installed on 20,583.30 acres

**Collect water quality monitoring data from all relevant partners**

- ✓ Water quality monitoring from DEQ macro invertebrate study for Kalamazoo watershed was reported.
  - Out of 45 sites monitored, 0% were ranked poor, 77.8% were ranked acceptable, 4.4% were ranked good, and 17.8% were ranked excellent.
- ✓ Water quality monitoring from DEQ macro invertebrate study for St. Joe watershed was reported.
  - Out of 31 sites monitored, 3.2% were ranked poor, 48.4% were ranked acceptable, 16.1% were ranked good, and 32.3% were ranked excellent.

(b) For the project

**ACTIVITY**

**Promote project through newsletters, websites, press releases, workshops, etc. - Ongoing**

- ✓ Distribution of AWEPP brochures and program information for each county.
- ✓ Promotion of project through District web pages in SE Lake Michigan Watershed as well as NRCS state webpage.
- ✓ Conservation District newsletters and e-news highlighting programs and assistance were sent to

over 7500 landowners.

- ✓ Involvement in Michigan Dept of Agriculture Sprayer Clinic targeting agricultural producers (over 405 landowners informed of AWEP)

**Identify & prioritize sites of concern as listed in approved watershed management plans, MSU-IWR's HIT program, NRCS inventories. - Ongoing**

- ✓ Use of High Impact Targeting models developed by MSE to allow for prioritization of sites at the field level.
- ✓ Review of existing management plans for targeting critical sites throughout the watershed.
- ✓ Creation of AWEP Priority Area Map
- ✓ Review of NRCS inventories/backlog.

**Provide targeted education & outreach to those sites identified as priorities**

- ✓ This has and will be an ongoing activity throughout the project.
- ✓ Preference given to landowners in priority areas.

**Meet w/all interested landowners to determine eligibility, discuss programs**

- ✓ Ongoing activity. 57 landowners assisted to date.
- ✓ 94 Best management practices implemented to date.

**Assist NRCS with conservation plan development and conservation practice installations**

- ✓ 31,910 acres Planned/Certified to date. – 63% complete

**Meet with project partners (Advisory Team) to monitor & evaluate project progress.**

- ✓ Routine communications are made with project partners. In many cases this is directly through our work with customers as they are often also customers of project partners. Quarterly reports and updates are also made to keep project partners updated as to our progress and theirs.

**Collect quarterly activity reports from partners (# of landowner visits, # of acres, # enrolled in AWEP)**

- ✓ Activity reports continue to be requested quarterly from project partners.

**Collect water quality monitoring data from all relevant partners**

- ✓ Water quality monitoring from DEQ macro invertebrate studies for Kalamazoo and St. Joe watersheds have been reported to date.
  - Overall data of 76 sites monitored in the AWEP area show, 1.3% were ranked poor, 65.8% were ranked acceptable, 9.2% were ranked good, and 23.7% were ranked excellent.

6. Does the project funding rate support the work progress? Report as percent spent of budgeted amounts for Federal and non-Federal.

\$340,219.00 / \$793,424.00 = 43% Federal

\$397,301.89 / \$441,900.00 = 89% non-Federal

7. Is there a change in principal investigator? No

8. Will the project take longer than the approved project period? If so, have you formally requested an amendment in writing?

It is not anticipated that this project will take longer than the approved project period.

9. What is the date and amount of your latest drawdown request? If no request has been submitted, please explain.

03/14/2012 - \$55,175.00

10. What is the date of your latest entry into the Great Lakes Accountability System (GLAS)?

Latest entry into GLAS completed on April 9, 2012.

11. Please include the STEPL modeling results. Optionally, you can send in the actual STEPL spreadsheet.

Total Load													
This is the summary of annual nutrient and sediment load for each subwatershed. This sheet is initially protected.													
1. Total load by subwatersheds													
Watershed	N Load (no BMP)	P Load (no BMP)	BOD Load (no BMP)	Sediment Load (no BMP)	N Reduction	P Reduction	BOD Reduction	Sediment Reduction	N Load (with BMP)	P Load (with BMP)	BOD (with BMP)	Sediment Load (with BMP)	%H Reduction
	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	lb/year	%
Kalamazoo	4712.0	1273.9	9874.4	729.1	0.0	0.0	0.0	0.0	4712.0	1273.9	9874.4	729.1	0.0
St. Joe	65289.6	14975.9	135288.7	5421.9	13813.9	1725.2	9324.4	282.6	51475.8	13250.7	125964.3	6139.3	21.2
Black River	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	70001.6	16249.8	144963.1	7151.0	13813.9	1725.2	9324.4	282.6	56187.8	14524.6	135638.7	6868.4	19.7

2. Total load by land use (with BMP)				
Sources	N Load (lb/yr)	P Load (lb/yr)	BOD Load (lb/yr)	Sediment Load (lb/yr)
Urban	0.00	0.00	0.00	0.00
Cropland	56187.70	14524.59	135638.70	6868.44
Pastureland	0.00	0.00	0.00	0.00
Forest	0.00	0.00	0.00	0.00
Feedlots	0.00	0.00	0.00	0.00
User Defined	0.00	0.00	0.00	0.00
Septic	0.00	0.00	0.00	0.00
Gully	0.00	0.00	0.00	0.00
Streambank	0.00	0.00	0.00	0.00
Groundwater	0.00	0.00	0.00	0.00
Total	56187.70	14524.59	135638.70	6868.44

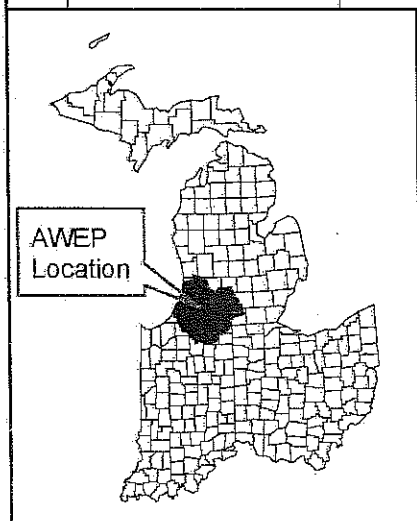
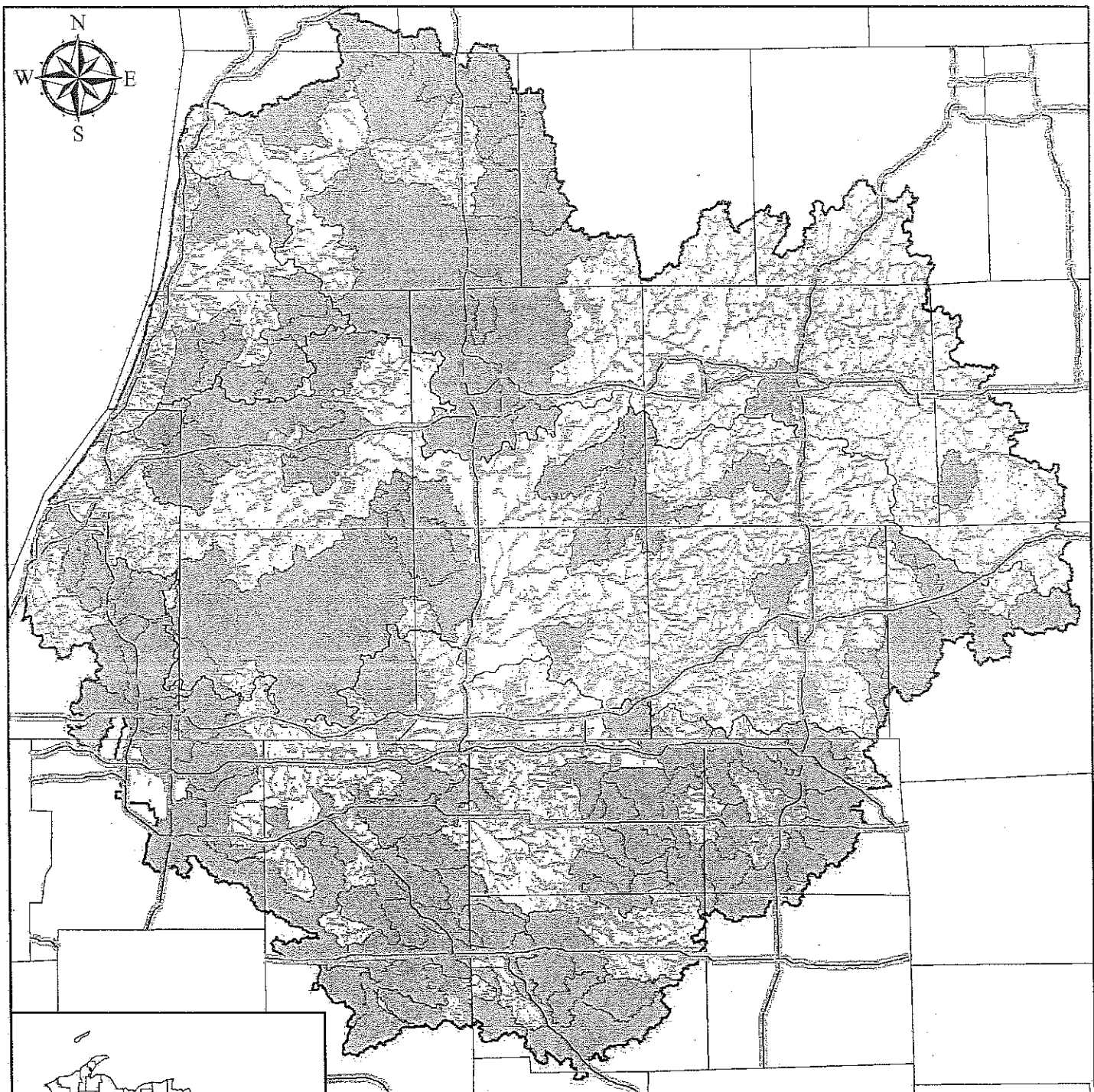
12. What is the date of your latest entry into BeachGuard? N/A

13. Are there any particular success stories associated with the GLRI project that you'd like to share? N/A

14. Please remember to attach all relevant deliverables associated with the project, in addition to the submission of the progress report.






Pest Management Plan	500
Irrigation Water mgmt. Plan	312
Irrigation Water mgmt. Plan	592.2
Irrigation Sprinkler Upgrade	239.4
Irrigation System Upgrade	95.3
Irrigation Water Mgmt. Plan	660.1
Irrigation System Upgrade	
Irrigation Water Mgmt. Plan	527.3
Irrigation Water Mgmt. Plan	
Irrigation Water Mgmt. Plan	432.9
Agrichemical Handling Facility	0.06
Irrigation System Upgrade	
Irrigation Water Mgmt. Plan	143.9
Nutrient Management Plan	1587.2
Pest Management Plan	
Irrigation Sprinkler Upgrade	
Irrigation Water Mgmt. Plan	318
Irrigation System Upgrade	88.8
Irrigation Water Mgmt. Plan	131.9
Irrigation Water Mgmt Plan	
Pest Mgmt. Plan	236
Agrichemical Handling Facility	
Cover Crop	359
Critical Area Planting	
Heavy Use Area Protection	0.1
Irrigation System Upgrade	40
Irrigation Water Mgmt. Plan	80
Irrigation System Upgrade	
Irrigation Water Mgmt. Plan	594
Agrichemical Handling Facility	
Heavy Use Area Protection	0.1
Irrigation System Upgrade	
Irrigation Water Mgmt. Plan	114
Underground Outlet	
Water & Sediment Control Basin	114
Irrigation System Upgrade	
Irrigation Water Mgmt. Plan	38.8
Irrigation Water Mgmt. Plan	190
Irrigation Water Mgmt.	
Cover Crop Certification	695.7
Nutrient Mgmt Certification	184.6
Pest Mgmt Certification	
Cover Crop Certification	90

# AWEP Priority Area Map



0 4 8 16 Miles  
0 5 10 20 Kilometers

## Legend

-  BMP
-  highways
-  Priority Areas
-  AWEP Area
-  County Boundaries





## CALHOUN CONSERVATION DISTRICT PROGRESS REPORT TO USEPA-GLNPO

Grant Number: GL - 00E00469 - 0

Project Title: Technical Assistance to Agricultural Producers in SE Lake Michigan Watersheds

Reporting Period Covered: 04-01-11 through 09-30-11

Principal Investigator: Michael Rubley

- 1. What work was accomplished for this reporting period? Report should quantify results as measurable products, i.e. numbers, acres, contacts, improvements in water quality, habitat, etc.**

Identification of landowners requiring technical and enrollment assistance into the Agricultural Water Enhancement Program (AWEP) and other applicable conservation programs has continued to be a priority. Currently 52 Landowner best management practices on 23,771 acres have been completed under the assistance of the AWEP program (Figure 1), with an additional 88 landowner best management practices being identified as requiring assistance. A list containing assistance provided to landowners and best management practices that have been completed is included and can be found in table 1.

Michigan State University has completed the development of the High Impact Targeting Model (HIT) for South East Lake Michigan. Work has begun on utilizing the HIT model for identifying priority sites within the Kalamazoo, St. Joe, and Black River watersheds for outreach to landowners within areas identified by HIT as having the greatest erosion and/or sediment rates.

Work has begun on identifying landowners in areas addressed as sensitive within existing watershed management plans. A list of landowners is being compiled for targeted outreach. These landowners will be sent informational flyers and educational materials in an effort to have landowner involvement and best management practices established on sensitive sites.

The Quality Assurance Project Plan was developed, and is in the process of being finalized.

- 2. What, if any, changes were made from the Object Class Categories listed in Sec. B of the SF 424A?**

None

- 3. If a problem was encountered, what action was taken to correct it?**

N/A

- 4. What work is projected for the new reporting period activity?**

Continue work on meeting with landowners to develop new conservation plans, and to implement best management practices identified in existing conservation plans.

Continue work on utilizing the HIT model and watershed management plans for identifying landowners in high risk and sensitive areas for additional outreach.

**5. Is the project work on schedule? List activities from the Work Plan, and any required Quality System Documentation, and report as percent completed.**

Project work is on schedule. Below is a summary of approved project tasks and where we are in terms of progress.

**ACTIVITY**

**Promote project through newsletters, websites, press releases, workshops, etc.**

- ✓ Promoted project through District web pages in SE Lake Michigan Watershed as well as NRCS state webpage.
- ✓ Promoted project through Conservation District newsletters and e-news highlighting programs and assistance.

**Identify & prioritize sites of concern as listed in approved watershed management plans, MSU-IWR's HIT program, NRCS inventories.**

- ✓ Utilize the HIT model to identify areas indicated as having elevated risks for erosion and sediments. Compile a list of landowners from areas identified by HIT to send promotional and educational information.
- ✓ Continue work with watershed councils to identify landowners in areas identified within existing watershed management plans as being critical sites.
- ✓ Continue work on NRCS inventories (also referred to as a "backlog").

**Provide targeted education & outreach to those sites identified as priorities**

- ✓ Continued compiling list of landowners identified by HIT and Watershed Management Plans

**Meet w/all interested landowners to determine eligibility, discuss programs**

- ✓ Ongoing activity. 140 Landowners have requested assistance to date.

**Assist NRCS with conservation plan development**

- ✓ 23,771 acres Planned/Certified to date. (See Table 1)

**Assist landowners & NRCS with conservation practice installations**

- ✓ Provide assistance to the 88 landowners that have requested assistance for Planning and practice installation

**Meet with project partners (Advisory Team) to monitor & evaluate project progress.**

- ✓ Continue communications, work on scheduling a partners meeting with to provide update on program. Quarterly reports and updates are also being made to keep project partners updated as to our progress and theirs.

**Collect quarterly activity reports from partners (# of landowner visits, # of acres, # enrolled in AWEP)**

- ✓ The latest quarterly report from partners has indicated that \$3,160,323 has been obligated this year with 38 contracts being funded.

**Collect water quality monitoring data from all relevant partners**

- ✓ Water quality monitoring data from partners has been collected. Review of the data for water quality improvements/changes is scheduled for next quarter.

**6. Does the project funding rate support the work progress?**

Yes.

**7. Is there a change in principal investigator?**

Yes, the previous investigator took another job. The principal investigator is now Michael Rubley II

**8. Will the project take longer than the approved project period? If so, have you formally requested an amendment in writing?**

It is not anticipated that this project will take longer than the approved project period.

**9. What is the date and amount of your latest drawdown request? If no request has been submitted, please explain.**

The last drawdown was 9-20-11 for \$47,908.82

Figure: 1

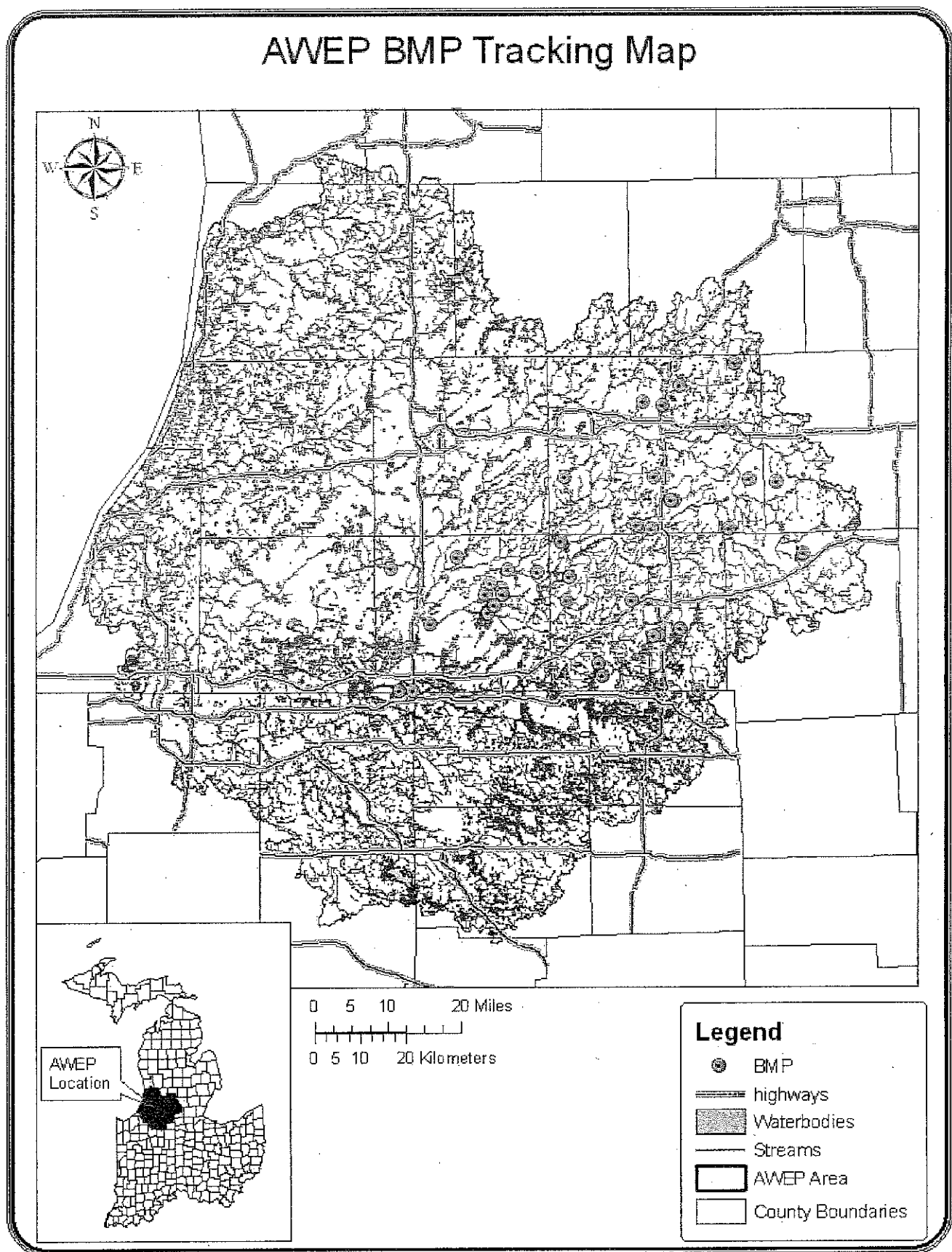


TABLE: 1

Practice	ACRES
Comprehensive Nutrient Management Planning	416.5
Filter Strip Design	144.07
Grassed Waterway Design	71.77
Irrigation Water Management Plan	132
Irrigation Water Management Plan	162
Conservation Planning	162.75
Conservation Planning	111.3
Nutrient Management Plan	797
Nutrient Management Plan	38.7
Nutrient Management Plan Developed	147
Conservation Planning	1396
Conservation Planning	1436.7
Nutrient Management Plan	161.3
Irrigation Water Management Plan	39
Irrigation Water Management Plan	79.52
Nutrient Management Plan	107.28
Irrigation Water Mgmt. Plan	239.4
Pest Management Plan	505.4
Pest Management Plan	200.9
Irrigation Water Mgmt.	150.8
Irrigation Water Mgmt. Plan	543.3
Nutrient Mgmt. Plan	1874.8
Pest Mgmt. Plan	1874.8
Cover Crop	72.6
Nutrient Mgmt. Plan	432.9
Pest Mgmt. Plan	432.9
Nutrient Management Plan	157
Pest Management Plan	157
Cover Crop	131.9
Irrigation Water Mgmt. Plan	88
Irrigation Water Mgmt. Plan	295.5
Nutrient Management Plan	412.5
Cover Crop	39
Pest Mgmt. Plan	166.9
Irrigation Water Mgmt.	213.4
Irrigation Water Mgmt.	281.1
Irrigation Water Mgmt.	338.9
Irrigation Water Mgmt.	150
Irrigation Water Mgmt. Plan	84.4
Irrigation Water Mgmt.	441.4
Pest Management Plan	230
Cover Crop	566.9
Pest Mgmt. Plan	1820.5
Nutrient Management Plan	83.7
Pest Management Plan	83.7
Pest Management Plan	320.7
Irrigation Water Mgmt. Plan	84
Cover Crop	250
Irrigation Water Mgmt. Plan	318
Irrigation Water Mgmt.	3624.8
Irrigation Water Mgmt.	2926.8
Cover Crop	1165.9
Pest Mgmt. Plan	236



## CALHOUN CONSERVATION DISTRICT PROGRESS REPORT TO USEPA-GLNPO

Grant Number: GL – 00E00469 – 0

Project Title: Technical Assistance to Agricultural Producers in SE Lake Michigan Watersheds

Reporting Period Covered: 10-1-10 through 3-31-11

Principal Investigator: Gregg Strand

**1. What work was accomplished for this reporting period? Report should quantify results as measurable products, i.e. numbers, acres, contacts, improvements in water quality, habitat, etc.**

The primary goal of this project is aimed at improving water quality by assisting producers in the Southeast Lake Michigan Watershed. To meet this goal, the first and most logical step was to initiate communication with all of the NRCS offices and other relevant partners located in the watershed area. This included email blasts informing of the additional technical assistance available through GLRI, along with office visits and several meetings with District Conservationists (NRCS) and others directly engaged with producers. Based on these communications, a preliminary list of producers was developed and has been the basis for outreach to potential customers. 55 landowners have been identified/prioritized to date as needing additional technical assistance and enrollment assistance into the Agricultural Water Enhancement Program (AWEP) and other applicable conservation programs.

Through March 31, 2011 this outreach effort has resulted in planning and technical assistance on 17,011 acres of land. Practices associated with these acres include cover crops, pest and nutrient management, irrigation evaluations, and heavy use areas. The complete list of practices and associated acres is located in Table 1.

Note that the list of work is being accomplished during the first enrollment period that has occurred for AWEP since this project started, and contracts have not yet been selected for funding. This being the case, we do not as yet have final numbers of contracts/customers that have been accepted into the AWEP program and will result in implementation of conservation practices that have been planned. As we move forward in this program enrollment phase, we anticipate having more comprehensive figures in terms of ALL activities (GLRI and partner supported). These practices will then be reassessed through STEP-L and quantified in terms of sediment and nutrient load reductions, which will be reported on an annual basis.

In addition to working closely with NRCS, this project will be relying on targeted outreach based on the High Impact Targeting (HIT) model for erosion developed by Michigan State University. We have met several times with GIS specialists and project managers at MSU to finalize the development and refining of the model for the SE Lake Michigan watershed. Once this is completed (anticipated for summer 2011), we will initiate a targeted outreach to landowners identified from the model as having a high risk of erosion and sedimentation. These landowners will be prioritized for technical assistance and working with NRCS we are planning to incorporate additional ranking criteria that would help these projects receive priority funding through AWEP.

TABLE 1: Conservation Technical Assistance Through March 31, 2011

November 2010	Irrigation Water Mgmt. Plan	84.4	Certified
	Irrigation Water Mgmt. Plan	295.5	Certified
	Nutrient Mgmt. Plan	432.9	Certified
	Pest Mgmt. Plan	432.9	Certified
	Cover Crop	72.6	Certified
	Irrigation Water Mgmt. Plan	239.4	Certified
	Cover Crop	1165.9	Certified
	Irrigation Water Mgmt. Plan	318	Certified
	Irrigation Water Mgmt. Plan	84	Written
	Cover Crop	131.9	Certified
	Irrigation Water Mgmt. Plan	88	Certified
	Irrigation Water Mgmt. Plan	543.3	Certified
	Cover Crop	39	Certified
	Cover Crop	566.9	Certified
	Cover Crop	250	Certified
	Irrigation Water Mgmt.	338.9	Certified
	Irrigation Water Mgmt.	281.1	Certified
	Irrigation Water Mgmt.	213.4	Certified
	Irrigation Water Mgmt.	150	Certified
	Pest Management Plan	200.9	Certified
	Irrigation Water Mgmt.	150.8	Certified
January 2011	Pest Management Plan	83.7	Certified
	Nutrient Management Plan	83.7	Certified
	Pest Management Plan	320.7	Certified
	Nutrient Mgmt. Plan	1874.8	Certified
	Pest Mgmt. Plan	1874.8	Certified
	Pest Mgmt. Plan	166.9	Certified
	Pest Mgmt. Plan	1820.5	Certified
	Pest Management Plan	505.4	Certified
	Irrigation System Upgrade	95.3	Planned
	Irrigation Water Mgmt. Plan	660.1	Planned
	Agrichemical Handling Facility		Planned
	Heavy Use Area Protection	0.8	Planned
	Irrigation System Upgrade	125.8	Planned
	Irrigation Water Mgmt. Plan	125.8	Planned
March 2011	Irrigation System Upgrade	88.8	Planned
	Irrigation Water Mgmt. Plan	131.9	Planned
	Irrigation System Upgrade	527.3	Planned
	Irrigation Water Mgmt. Plan	527.3	Planned
	Irrigation System Upgrade	38.8	Planned
	Irrigation Water Mgmt. Plan	38.8	Planned
	Agrichemical Handling Facility		Planned
	Irrigation System Upgrade	40	Planned
	Irrigation Water Mgmt. Plan	80	Planned
	Cover Crop	359	Planned
	Heavy Use Area Protection	0.1	Planned
	Irrigation System Upgrade	92.3	Planned
	Irrigation Water Mgmt. Plan	132.1	Planned
	Pest Management Plan	230	Written
	Nutrient Management Plan	797	Written
	Nutrient Management Plan	110	Written
TOTAL ACRES		17011.5	



2. What, if any, changes were made from the Object Class Categories listed in Sec. B of the SF 424A?

None

3. If a problem was encountered, what action was taken to correct it?

N/A

4. What work is projected for the new reporting period activity?

As we receive confirmation on approved AWEP and other program contracts, we will continue planning and providing implementation assistance to move these projects forward. Although funding is limited for AWEP, there will be a continuing need to service these customers as well as solicit additional landowners who wish to take advantage of the technical assistance available in the SE Lake Michigan Watershed.

We will also be utilizing the HIT model and available watershed plans for targeting high risk fields and identifying landowners for additional outreach.

5. Is the project work on schedule? List activities from the Work Plan, and any required Quality System Documentation, and report as percent completed.

Project work is on schedule. Unlike other "single-site" projects that may have specific activities and implementation schedules, this type of project requires a broader approach and oversight of different sites, practices and landowners, as well as a great deal of outreach and prioritization. Below is a summary of approved project tasks and where we are in terms of progress.

**ACTIVITY**

**Promote project through newsletters, websites, press releases, workshops, etc.**

- ✓ Developed AWEP brochures and program information for each county, which has been placed in all NRCS field offices.
- ✓ Promoted project through District web pages in SE Lake Michigan Watershed as well as NRCS state webpage.
- ✓ Conservation District newsletters and e-news highlighting programs and assistance were sent to over 7500 landowners.
- ✓ Involvement in Michigan Dept of Agriculture Sprayer Clinic, which targets agricultural producers (over 280 attended)

**Identify & prioritize sites of concern as listed in approved watershed management plans, MSU-IWR's HIT program, NRCS inventories.**

- ✓ Working with MSU, we are refining the High Impact Targeting models to allow for prioritization of sites at the field level. Current elevation and soils data only allow for larger catchment areas to be prioritized. MSU will be finalizing the first part of this by summer of 2011, and the entire SE Lake

Michigan watershed by the end of 2011.

- ✓ Through review of existing management plans, we are also targeting critical sites throughout the watershed.
- ✓ NRCS inventories (also referred to as a "backlog"), are the basis for much of the work completed to date. 55 landowners have been referred to us for assistance.

**Provide targeted education & outreach to those sites identified as priorities**

- ✓ This has and will be an ongoing activity throughout the project, especially for NRCS customers that are not receiving assistance. Once we have refined the HIT model to identify new sites that can be targeted for assistance we can/will expand our targeted outreach.

**Meet w/all interested landowners to determine eligibility, discuss programs**

- ✓ Ongoing activity. 55 Landowners have requested assistance to date.

**Assist NRCS with conservation plan development**

- ✓ 17,011 acres Planned/Certified to date. (See Table 1)

**Assist landowners & NRCS with conservation practice installations**

- ✓ Practice installation will be dependent upon acceptance into AWEP or other programs that will provide financial assistance to landowners. Totals tbd.

**Meet with project partners (Advisory Team) to monitor & evaluate project progress.**

- ✓ Routine communications are made with project partners. In many cases this is directly through our work with customers as they are often also customers of project partners. Quarterly reports and updates are also made to keep project partners updated as to our progress and theirs.

**Collect quarterly activity reports from partners (# of landowner visits, # of acres, # enrolled in AWEP)**

- ✓ Activity reports are requested quarterly from project partners. To date, these reports have been delayed until AWEP enrollment has been completed for fiscal year 2011.

**Collect water quality monitoring data from all relevant partners**

- ✓ No relevant water quality monitoring has been reported to date. As part of this project, we will Collect & summarize water quality improvements/changes, conservation practice installations, pollutant reductions, etc. from all relevant partners for annual reports as well as a final report.

6. Does the project funding rate support the work progress?

Yes.

7. Is there a change in principal investigator?

No.

8. Will the project take longer than the approved project period? If so, have you formally requested an amendment in writing?

Although all of our efforts include ongoing and long term approaches to identifying and addressing water quality issues, it is not anticipated that this project will take longer than the approved project period.

9. What is the date and amount of your latest drawdown request? If no request has been submitted, please explain.

The last drawdown was 3-2-11 for \$48,567.81





## Request Details

Tracking Number : EPA-R5-2013-010099	Request Type : FOIA
Requester : Ms. Lori Hopkins	Request Track : Simple
Organization : N/A	Submitted Date : 09/19/2013
Requester Has Account : No	Due Date : 10/18/2013
Email Address : hopkinsjl@sbcglobal.net	Assigned To : Anna Rzeznik (Region 5)
Phone Number : N/A	Last Assigned Date : 09/19/2013
Fax Number : N/A	Last Assigned By : Joseph Winfrey (Region 5)
Address : P.O. Box 2374	Fee Limit : \$25.00
City : Battle Creek	
State/Province : MI	
Zip Code/Postal Code : 49016	

## Task Details

Task Type : Request Detail	Assigned To : Andrea Breese (Water Division)
Due Date : 10/18/2013	Last Assigned Date : 09/20/2013
Task Submitted Date : 09/20/2013	Last Assigned By : Mery Jackson (Water Division)
Description : grant	
Comments :	

[Submission Details](#)[Case File](#)[Admin Cost](#)[Assigned Tasks](#)[Comments](#)[Review](#)

## Request Handling

Requester Info Available to Yes the Public :	Request Perfected : Yes
Request Track : Simple	Perfected Date : 09/19/2013
Fee Category : Other	Acknowledgement Sent Date:
Fee Waiver Requested: Yes	Unusual Circumstances ? No
Fee Waiver Status: Pending Decision	
Expedited Processing No Requested :	
Expedited Processing Status : N/A	

## Request Description

Short Description : Copy of the following grant status reports &/or final report: EPAGLNPO-2010-NS-8-1009-150 submitted by the Calhoun Soil Conservation District, Calhoun County, Michigan.

Copy of the following grant status reports &/or final report: EPAGLNPO-2010-NS-8-1009-150 submitted by the Calhoun Soil Conservation District, Calhoun County, Michigan.

Description Available to the Yes Public :

Has Request Been Modified?

## Attached Supporting Files

Public :

Attached File	Type	Size (MB)
<i>lori.hopkins.pdf</i>	PDF	0.11